



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,584	03/14/2001	John R. Jacobson	55559USA6A	3434
32692	7590	11/18/2005	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			EDWARDS, LAURA ESTELLE	
PO BOX 33427			ART UNIT	PAPER NUMBER
ST. PAUL, MN 55133-3427			1734	

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/808,584	JACOBSON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Laura Edwards	1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 September 2005.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 36-56 is/are withdrawn from consideration.
- 5) Claim(s) 58-61 is/are allowed.
- 6) Claim(s) 1-9, 19-24, 29-35 and 57 is/are rejected.
- 7) Claim(s) 10-18 and 25-28 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

***Election/Restrictions***

This application contains claims 36-56 drawn to non-elected inventions. A complete reply to the final rejection should include cancellation of the nonelected claims or other appropriate action.

***Claim Objections***

Claims 58-61 are objected to because of the following informality: in claim 58, line 11, "an article" should be changed to --the article--. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7, 8, 9, 19-24, 29, 30, 31, 35, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonkers (US 4,299,164) in view of Jaffa et al (US 5,501,147).

Jonkers teaches a coating or screen printing apparatus comprising an applicator roll (3), a conveyor (not shown, see area of travel P) for transporting a web or sheet to the applicator, and a squeegee device including a metering bar (4) having a fixed or stationary arcuate end (see col. 5, lines 14 to col. 6, lines 10) positioned against the applicator to meter a predetermined amount of coating material to the applicator for transfer to the web or sheet transported to the applicator by the conveyor, wherein the metering bar forms a nip with the applicator via exertion of force generated by a hose (25) against the bar against the applicator, the predetermined amount of coating material being determined, in part, by the amount of force exerted upon the metering bar

Art Unit: 1734

at the nip. Even though Jonkers do not illustrate a conveyor for sequentially feeding a web or sheet to the screen printing applicator, it was known in the art at the time the invention was made, to utilize an endless conveyor belt system to convey the sheet or web to a screen printing apparatus as evidenced by Jaffa et al (see col. 5, lines 66 to col. 6, lines 1-5). It would have been obvious to one of ordinary skill in the art to utilize an endless conveyor belt system as taught by Jaffa et al in the Jonkers screen printing apparatus in order to transport the web or sheet into and out of the screen printing apparatus.

With respect to the hardness of the applicator, while neither Jonkers or Jaffa et al set forth the hardness value of the applicator roll, it is within the purview of one skilled in the art to make the screen printer applicator of an appropriate material having a desired hardness in so long as the applicator roll enables transfer of the coating to the web or sheet with a high resistance to wear.

With respect to the apparatus being enabled for articles of different dimensions, including lengths, the apparatus as defined by the combination would enable a continuous web, serrated web, or discrete sheet to be screen printed because of the use of an endless conveyor type system.

With respect to the radius of the end of the metering bar, even though neither Jonkers or Jaffa et al set forth such a value, Jonkers illustrates in Figs. 3, 4, and 6, various radii for the arcuate end of the metering bar such that it is within the level of ordinary skill in the art to determine the appropriate radius dimension of the end so as to meter the predetermined amount of coating material on the web or sheet.

Art Unit: 1734

With respect to the force applied to the metering bar, see Jonkers that recognizes use of an appropriate pressure to maintain a constant nip angle (see col. 4, lines 41-54).

With respect to the apparatus defined by the combination above screen-printing coating composition onto the side of a roll of tape, the apparatus would enable such a coating process via sandwiching of the roll of tape on its side between the conveyor belt and the applicator roller.

With respect to the screen printing apparatus including a drying or solidifying station, while Jonkers does not suggest drying of the wet printed web or sheet via an adjacent drying or solidifying station, Jaffa et al recognize such conventional use of a drying station downstream of the screen printing apparatus to dry the web or sheet (col. 4, lines 56+). It would have been obvious to one of ordinary skill in the art to provide a drying or solidifying station downstream of the Jaffa et al screen printing apparatus to provide for a dry finished screen printed product.

With respect to the use of plural endless belts to transport the web or sheet from the screen-printing apparatus to the drying station, see Jaffa et al wherein plural endless conveyors connect the screen-printing section of the apparatus with the drying section.

Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonkers (US 4,299,164) and Jaffa et al (US 5,501,147) as applied to claim 19 above, and further in view of Kirk Othmer.

The teachings of Jonkers and Jaffa et al have been mentioned above but neither teach or suggest a dryer in the form of a radiation source. However, Kirk Othmer recognizes the use of some type of drying or curing type system (see DRYING SYSTEMS, pages 422-425 and RADIATION CURTNG, pages 832-834) to ensure proper application of a coating to the

Art Unit: 1734

substrate or article without a detrimental effect on the end product (see bottom of page 422). In the event of use of the screen printing apparatus as defined by the combination above with a radiation curable coating composition and in order to enable the composition to dry, it would have been obvious to one of ordinary skill in the art to utilize any known source of radiation following coating of the article in order to provide a dry finished coated product. Furthermore, it is within the purview of one skilled in the art to use any known and conventional source for drying or curing a given coating composition to effect a dry product.

*Allowable Subject Matter*

Claims 58-61 would be allowable, however, correction to line 11 of claim 58 is required.

Claims 10-18 and 25-28 would be allowable.

*Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 1734

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Edwards whose telephone number is (571) 272-1227. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Laura Edwards  
Primary Examiner  
Art Unit 1734

November 10, 2005